

AMENDMENTS TO THE CLAIMS

LISTING OF CLAIMS

1. (Currently Amended) A computer-readable medium having a data structure for managing reproduction duration of still images, comprising:

a data area storing presentation data multiplexed into a transport stream, the presentation data being divided into a number of still picture units, each still picture unit including at least one still picture and associated related data, the related data not including audio data;

a navigation area storing at least one playlist and at least one clip information file separately within the navigation area, the playlist including at least one playitem, the playitem indicating at least one of the still picture units to reproduce and providing first and second duration information for display of the still picture in the still picture unit, and the clip information file including at least one entry point map, the entry point map including at least one entry point providing at least an address of a still picture in the transport stream,

wherein the first duration information indicates whether to display the still picture for one of a finite and an infinite period of time; and

the second duration information indicates a length of time to display the still picture when the first duration information indicates to display the still picture for a finite period of time.

2. (Previously Presented) The computer-readable medium of claim 1, wherein the related data in at least one still picture unit includes graphics data and/or subtitle data.

3. (Canceled)

4. (Previously Presented) The computer-readable medium of claim 1, wherein the presentation data is multiplexed into the transport stream on a still picture unit by still picture unit basis.

5. (Canceled)

6. (Previously Presented) The computer-readable medium of claim 1, wherein the entry point map includes an entry point associated with each still picture unit.

7. (Currently Amended) The computer-readable medium of claim 6, wherein ~~the duration information indicates whether to display the still picture for one of a finite and an infinite period of time; and~~

at least a number of the entry points each include a presentation time stamp associated with the still picture in the associated still picture unit such that, when the first duration information indicates to display a still picture for a finite duration, the finite duration is determinable at least in part from the presentation time stamp in the entry point associated with the still picture and the presentation time stamp in the next entry point.

8. (Previously Presented) The computer-readable medium of claim 1, wherein each elementary stream of the still picture and associated related data is aligned within the still picture unit.

9. (Previously Presented) The computer-readable medium of claim 8, wherein each elementary stream is a packetized elementary stream.

10. (Previously Presented) The computer-readable medium of claim 9, wherein each still picture unit includes one packet from each packetized elementary stream.

11. (Currently Amended) The computer-readable medium of claim 10, wherein the first duration information indicates whether to display the still picture for one of a finite and an infinite period of time; and

a number of the packets of the packetized elementary stream of still picture data each include a presentation time stamp such that, when the first duration information indicates display of the still picture for a finite duration, the finite duration is determinable using the presentation time stamp in the packet of the still picture and a presentation time stamp in a next packet.

12. (Canceled)

13. (Previously Presented) The computer-readable medium of claim 1, wherein the data area stores the presentation data in a first clip file, and stores audio data in a second clip file.

14. (Previously Presented) The computer-readable medium of claim 13, wherein the playlist further includes at least one sub-playitem, the sub-playitem providing navigation information for reproducing the audio data from the second clip file.

15. (Previously Presented) The computer-readable medium of claim 1, wherein each still picture unit includes only one still picture.

16. (Canceled)

17. (Canceled)

18. (Canceled)

19. (Canceled)

20. (Canceled)

21. (Canceled)

22. (Canceled)

23. (Canceled)

24. (Canceled)

25. (Canceled)

26. (Canceled)

27. (Canceled)

28. (Canceled)

29. (Canceled)

30. (Canceled)

31. (Canceled)

32. (Canceled)

33. (Currently Amended) A method of recording a data structure for managing reproduction duration of at least one still image on a recording medium, comprising:

recording presentation data multiplexed into a transport stream in a data area of the recording medium, the presentation data being divided into a number of still picture units, each still picture unit including at least one still picture and associated related data, the related data not including audio data; and

recording at least one playlist and at least one clip information file separately on the recording medium, the playlist including at least one playitem, the playitem indicating at least one of the still picture units to reproduce and providing first and second duration information for display of the still picture in the still picture unit, and the clip information file includes at least one entry point map, the entry point map including at least one entry point providing at least an address of a still picture in the transport stream,

wherein the first duration information indicates whether to display the still picture for one of a finite and an infinite period of time; and

the second duration information indicates a length of time to display the still picture when the first duration information indicates to display the still picture for a finite period of time.

34. (Currently Amended) A method of reproducing a data structure for managing reproduction duration of at least one still image recorded on a recording medium, comprising:

reproducing presentation data multiplexed into a transport stream from a data area of the recording medium, the presentation data being divided into a number of still picture units, each still picture unit including at least one still picture and associated related data, the related data not including audio data; and

reproducing at least one playlist and at least one clip information file from the recording medium, the playlist including at least one playitem, the playitem indicating at least one of the still picture units to reproduce and providing first and second duration information for display of the still picture in the still picture unit, and the clip information file includes at least one entry point map, the entry point map including at least one entry point providing at least an address of a still picture in the transport stream wherein the playlist and clip information files are stored separately on the computer-readable medium,

wherein the first duration information indicates whether to display the still picture for one of a finite and an infinite period of time; and

the second duration information indicates a length of time to display the still picture when the first duration information indicates to display the still picture for a finite period of time.

35. (Currently Amended) An apparatus for recording a data structure for managing reproduction duration of at least one still image on a recording medium, comprising:

~~an optical recording device~~ a pick up configured to record data on the recording medium;

a controller configured to control the ~~optical recording device~~ pick up to record presentation data multiplexed into a transport stream in a data area of the recording medium, the presentation data being divided into a number of still picture units, each still picture unit including at least one still picture and associated related data, the related data not including audio data; and

the controller configured to control the ~~optical recording device~~ pick up to record at least one playlist and at least one clip information file separately on the recording medium, the playlist including at least one playitem, the playitem indicating at least one of the still picture units to reproduce and providing first and second duration information for display of the still picture in the still picture unit, and the clip information file including at least one entry point map, the entry

point map including at least one entry point providing at least an address of a still picture in the transport stream,

wherein the first duration information indicates whether to display the still picture for one of a finite and an infinite period of time; and

the second duration information indicates a length of time to display the still picture when the first duration information indicates to display the still picture for a finite period of time.

36. (Currently Amended) An apparatus for reproducing a data structure for managing reproduction duration of at least one still image recorded on a recording medium, comprising:

~~an optical reproducing device~~a pick up configured to reproduce data recorded on the recording medium;

a controller configured to control the ~~optical reproducing device~~pick up to reproduce presentation data multiplexed into a transport stream from a data area of the recording medium, the presentation data being divided into a number of still picture units, each still picture unit including at least one still picture and associated related data, the related data not including audio data; and

the controller configured to control the ~~optical reproducing device~~pick up to reproduce at least one playlist and at least one clip information file from the recording medium, the playlist including at least one playitem, the playitem indicating at least one of the still picture units to reproduce and providing first and second duration information for display of the still picture in the still picture unit, and the clip information file includes at least one entry point map, the entry point map including at least one entry point providing at least an address of a still picture in the transport stream wherein the playlist and clip information files are stored separately on the computer-readable medium,

wherein the first duration information indicates whether to display the still picture for one of a finite and an infinite period of time; and

the second duration information indicates a length of time to display the still picture when the first duration information indicates to display the still picture for a finite period of time.

37. (Currently Amended) The method of claim 33, wherein the entry point map includes an entry point associated with each still picture unit;

~~the duration information indicates whether to display the still picture for one of a finite and an infinite period of time; and~~

at least a number of the entry points each include a presentation time stamp associated with the still picture in the associated still picture unit such that, when the first duration information indicates to display a still picture for a finite duration, the finite duration is determinable at least in part from the presentation time stamp in the entry point associated with the still picture and the presentation time stamp in the next entry point.

38. (Currently Amended) The method of claim 33, wherein each elementary stream is a packetized elementary stream;

~~the duration information indicates whether to display the still picture for one of a finite and an infinite period of time; and~~

a number of the packets of the packetized elementary stream of still picture data each include a presentation time stamp such that, when the first duration information indicates display of the still picture for a finite duration, the finite duration is determinable using the presentation time stamp in the packet of the still picture and a presentation time stamp in a next packet.

39. (Previously Presented) The method of claim 33, wherein the data area stores the presentation data in a first clip file and stores audio data in a second clip file; and

the playlist further includes at least one sub-playitem providing navigation information for reproducing the audio data from the second clip file.

40. (Previously Presented) The method of claim 33, wherein each still picture unit includes only one still picture.

41. (Currently Amended) The method of claim 34, wherein the entry point map includes an entry point associated with each still picture unit;

~~the duration information indicates whether to display the still picture for one of a finite and an infinite period of time; and~~

at least a number of the entry points each include a presentation time stamp associated with the still picture in the associated still picture unit such that, when the first duration information

indicates to display a still picture for a finite duration, the finite duration is determinable at least in part from the presentation time stamp in the entry point associated with the still picture and the presentation time stamp in the next entry point.

42. (Currently Amended) The method of claim 34, wherein each elementary stream is a packetized elementary stream;

~~the duration information indicates whether to display the still picture for one of a finite and an infinite period of time; and~~

a number of the packets of the packetized elementary stream of still picture data each include a presentation time stamp such that, when the first duration information indicates display of the still picture for a finite duration, the finite duration is determinable using the presentation time stamp in the packet of the still picture and a presentation time stamp in a next packet.

43. (Previously Presented) The method of claim 34, wherein the data area stores the presentation data in a first clip file and stores audio data in a second clip file; and

the playlist further includes at least one sub-playitem providing navigation information for reproducing the audio data from the second clip file.

44. (Previously Presented) The method of claim 34, wherein each still picture unit includes only one still picture.

45. (Previously Presented) The apparatus of claim 35, wherein the entry point map includes an entry point associated with each still picture unit.

46. (Currently Amended) The apparatus of claim 45, wherein ~~the duration information indicates whether to display the still picture for one of a finite and an infinite period of time; and~~

at least a number of the entry points each include a presentation time stamp associated with the still picture in the associated still picture unit such that, when the first duration information indicates to display a still picture for a finite duration, the finite duration is determinable at least in part from the presentation time stamp in the entry point associated with the still picture and the presentation time stamp in the next entry point.

47. (Currently Amended) The apparatus of claim 35, wherein each elementary stream is a packetized elementary stream; and

~~the duration information indicates whether to display the still picture for one of a finite and an infinite period of time; and~~

a number of the packets of the packetized elementary stream of still picture data each include a presentation time stamp such that, when the first duration information indicates display of the still picture for a finite duration, the finite duration is determinable using the presentation time stamp in the packet of the still picture and a presentation time stamp in a next packet.

48. (Previously Presented) The apparatus of claim 35, wherein the data area stores the presentation data in a first clip file and stores audio data in a second clip file; and

the playlist further includes at least one sub-playitem providing navigation information for reproducing the audio data from the second clip file.

49. (Previously Presented) The apparatus of claim 35, wherein each still picture unit includes only one still picture.

50. (Previously Presented) The apparatus of claim 36, wherein the entry point map includes an entry point associated with each still picture unit.

51. (Currently Amended) The apparatus of claim 50, wherein ~~the duration information indicates whether to display the still picture for one of a finite and an infinite period of time; and~~

at least a number of the entry points each include a presentation time stamp associated with the still picture in the associated still picture unit such that, when the first duration information indicates to display a still picture for a finite duration, the finite duration is determinable at least in part from the presentation time stamp in the entry point associated with the still picture and the presentation time stamp in the next entry point.

52. (Currently Amended) The apparatus of claim 36, wherein each elementary stream is a packetized elementary stream; and

~~the duration information indicates whether to display the still picture for one of a finite and an infinite period of time; and~~

a number of the packets of the packetized elementary stream of still picture data each include a presentation time stamp such that, when the first duration information indicates display of the still picture for a finite duration, the finite duration is determinable using the presentation time stamp in the packet of the still picture and a presentation time stamp in a next packet.

53. (Previously Presented) The apparatus of claim 36, wherein the data area stores the presentation data in a first clip file and stores audio data in a second clip file; and

the playlist further includes at least one sub-playitem providing navigation information for reproducing the audio data from the second clip file.

54. (Previously Presented) The apparatus of claim 36, wherein each still picture unit includes only one still picture.